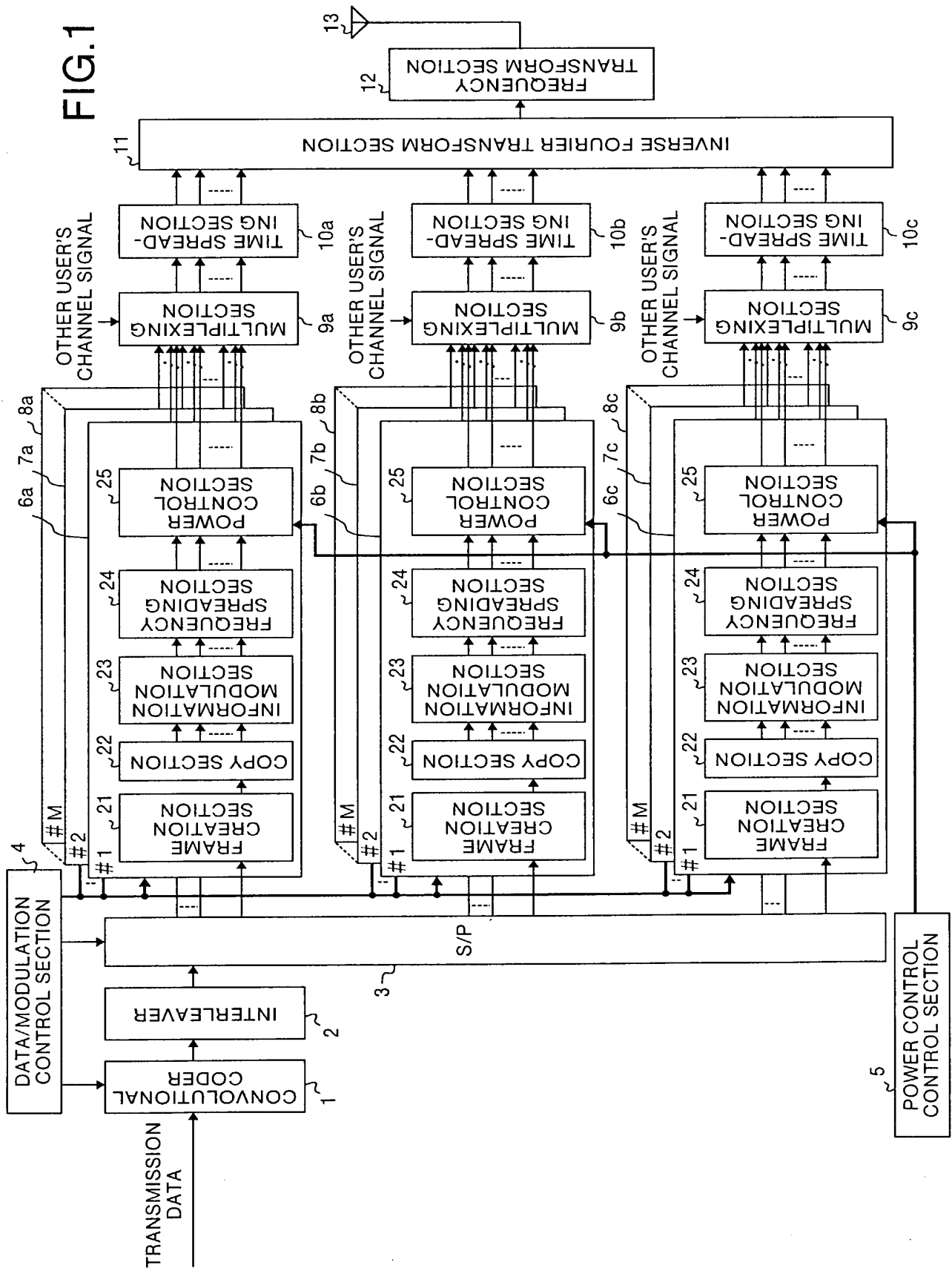
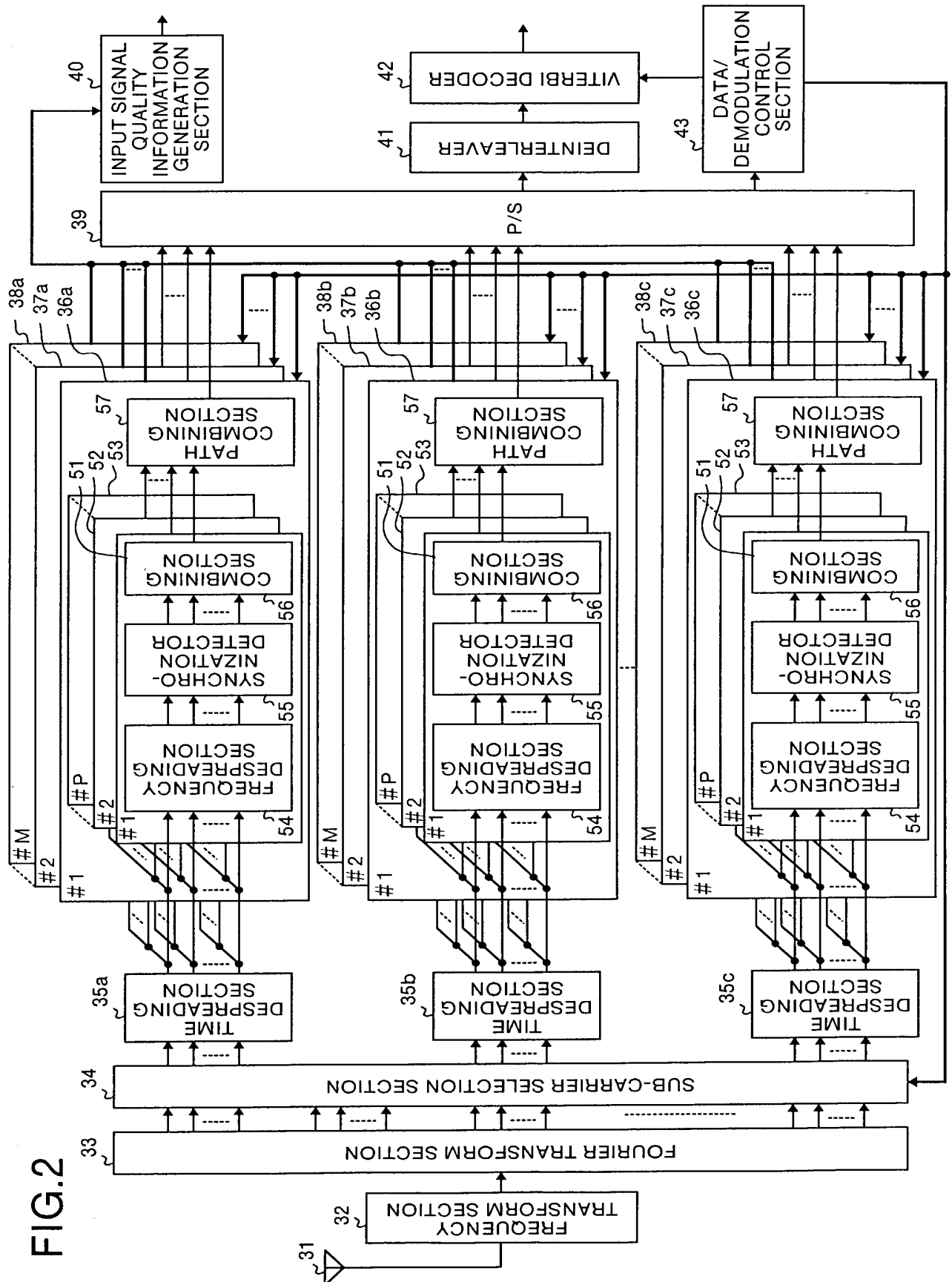


**FIG. 1**





**FIG. 2**

FIG.3

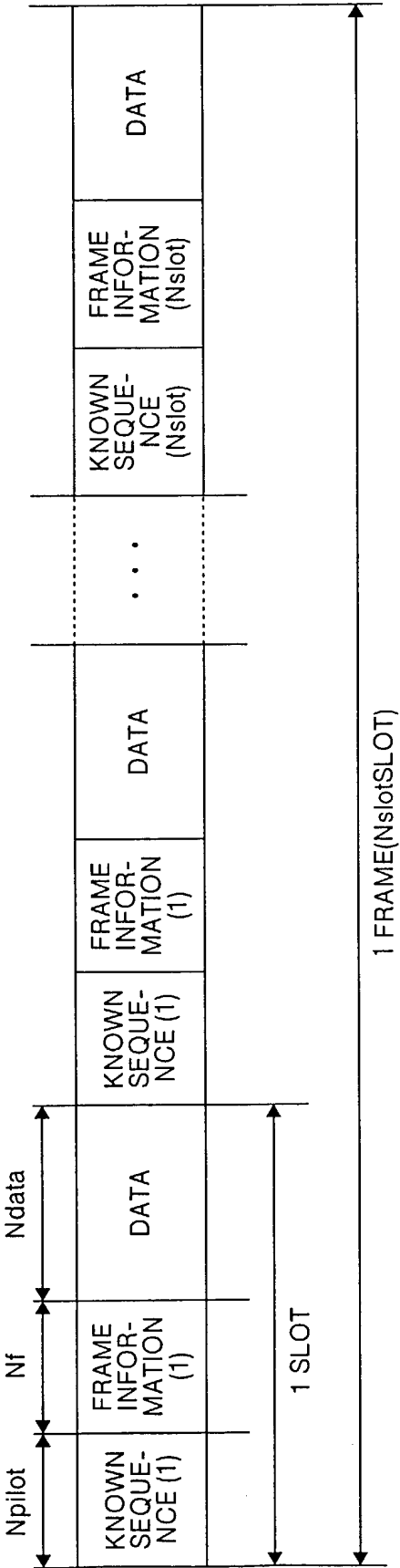


FIG.4

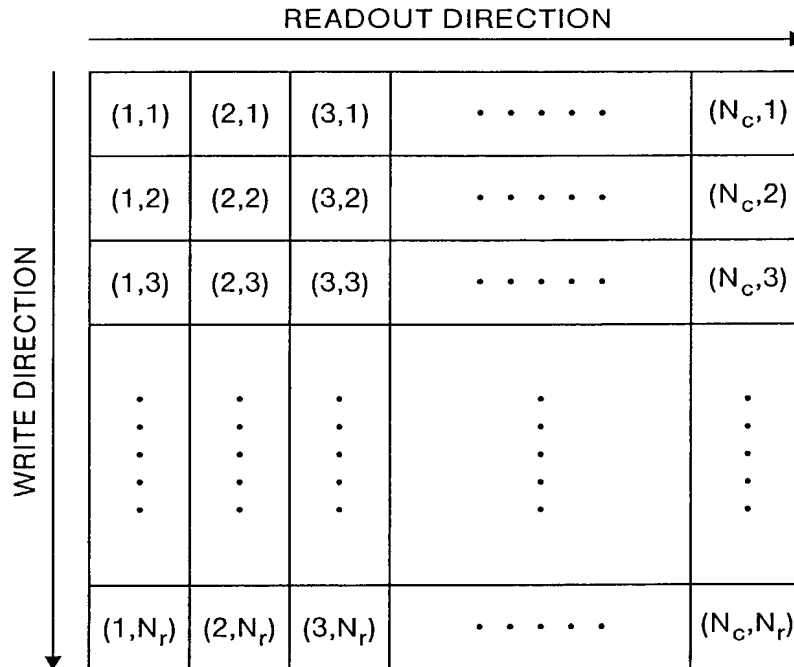
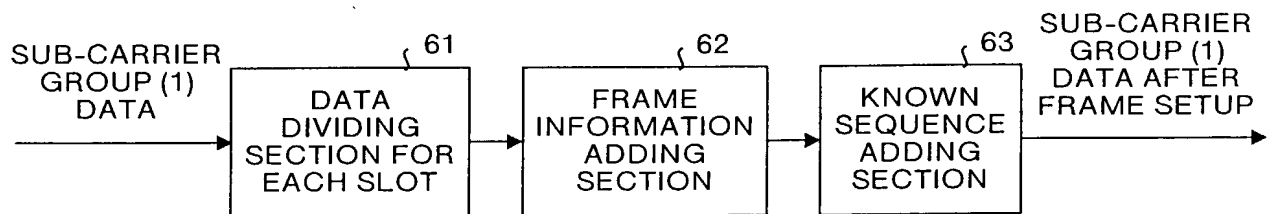


FIG.5



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FIG.6

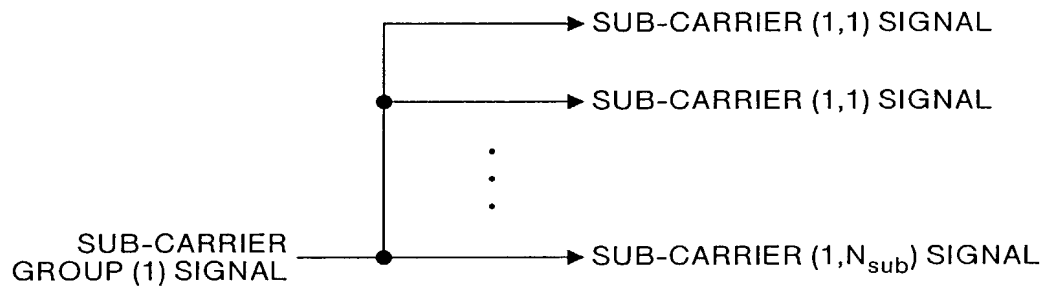


FIG.7

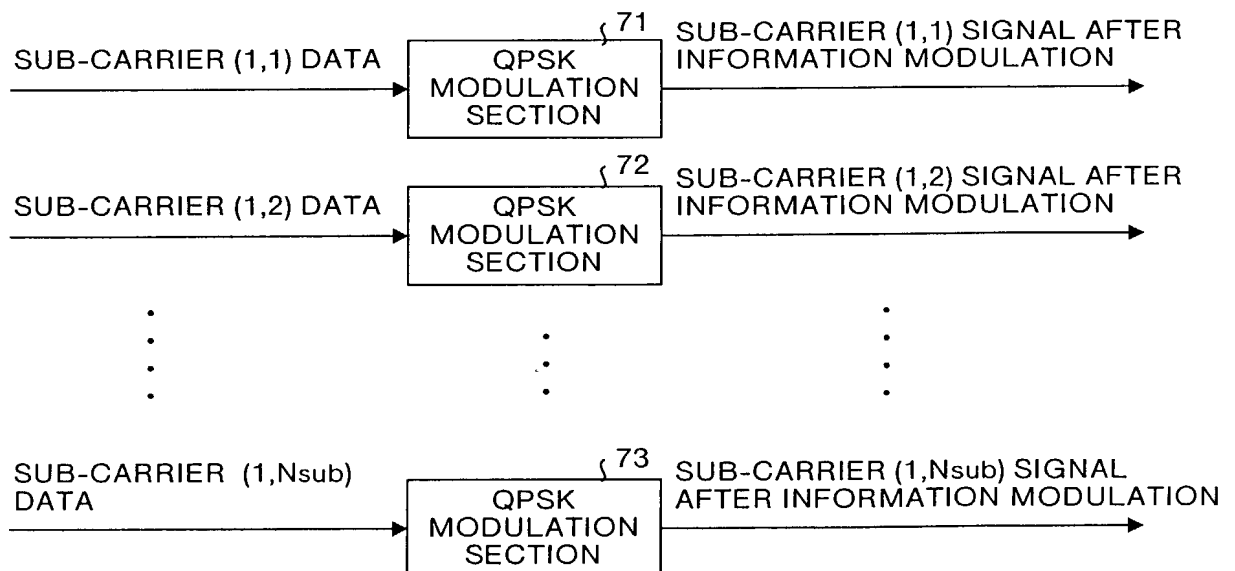


FIG.8

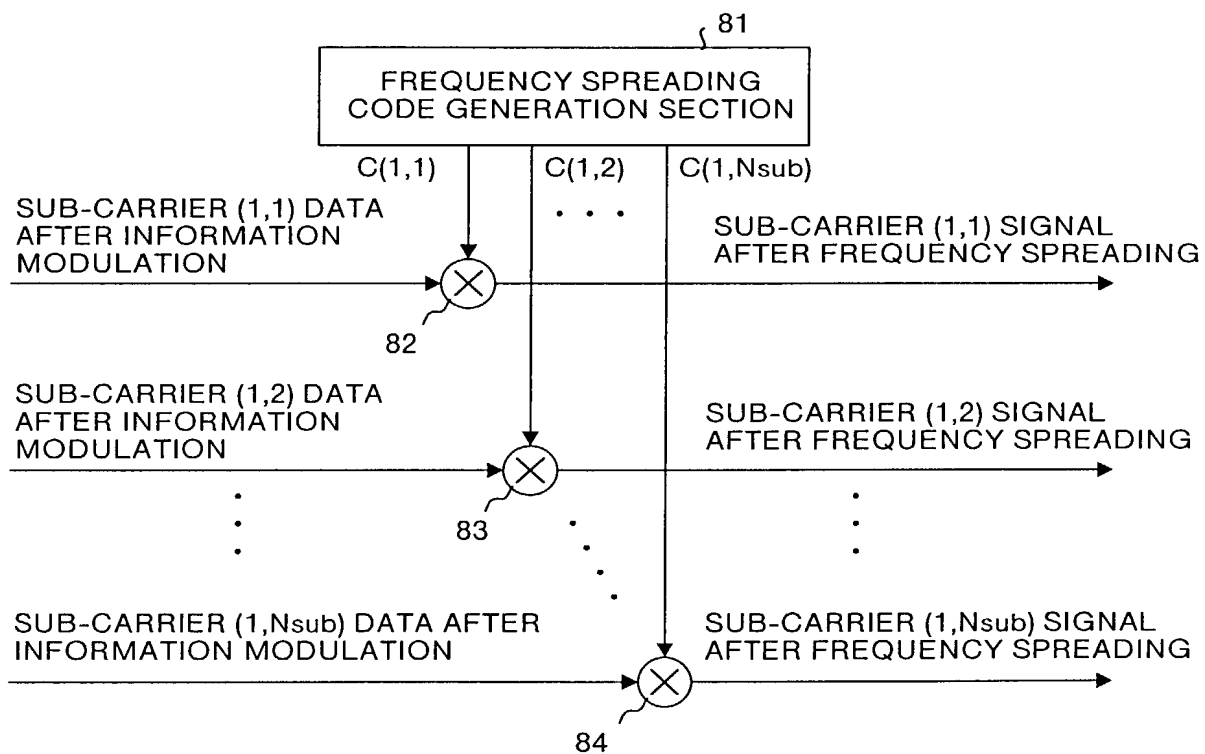


FIG.9

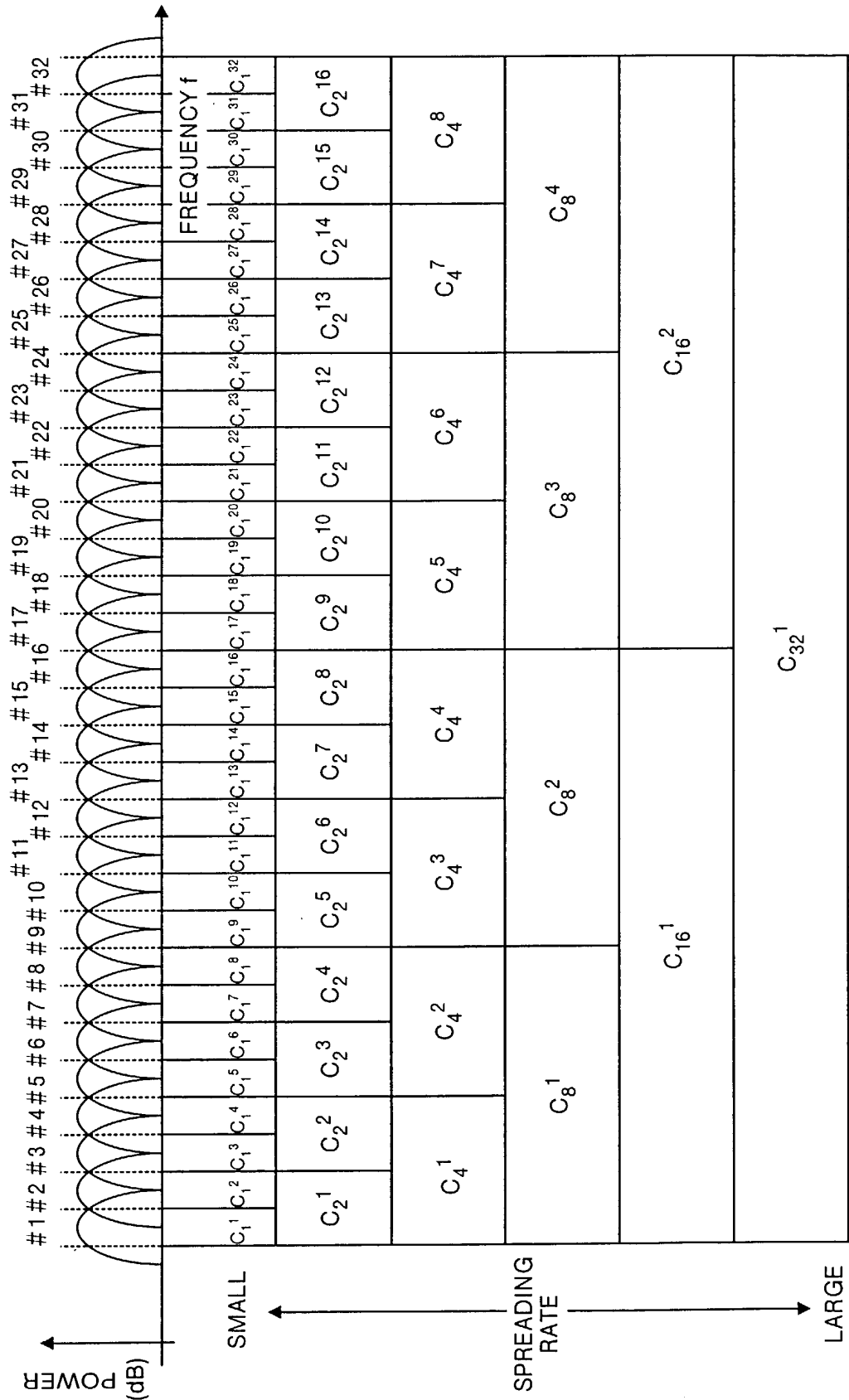


FIG.10

(a)  $C_1^{h=1}, h=1 \sim 32$

(b)  $C_2^i = \begin{bmatrix} C_{2,1}^i \\ C_{2,2}^i \end{bmatrix} = \begin{bmatrix} 1 & 1 \\ 1 & 0 \end{bmatrix}, i=1 \sim 16$

(c)  $C_4^j = \begin{bmatrix} C_{4,1}^j \\ C_{4,2}^j \\ C_{4,3}^j \\ C_{4,4}^j \end{bmatrix} = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 0 & 0 \\ 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 \end{bmatrix}, j=1 \sim 8$

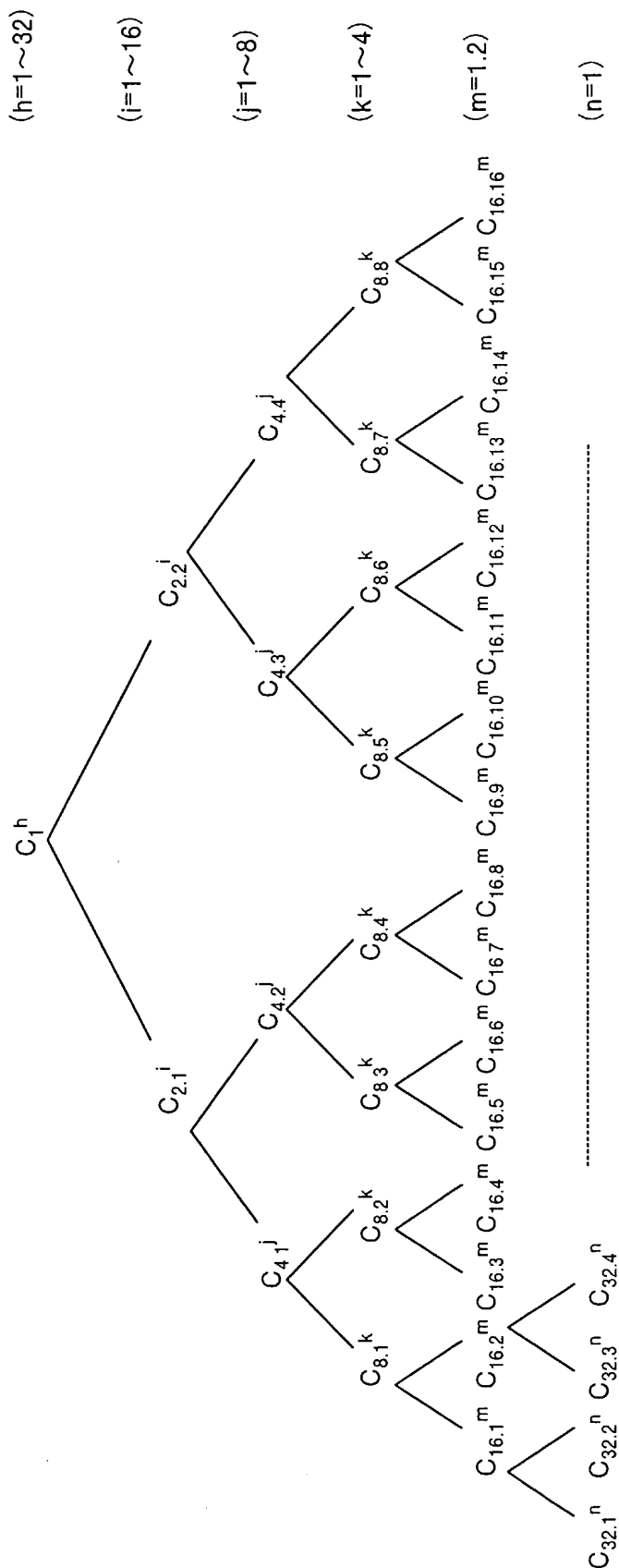
(d)  $C_8^k = \begin{bmatrix} C_{8,1}^k \\ C_{8,2}^k \\ C_{8,3}^k \\ C_{8,4}^k \\ C_{8,5}^k \\ C_{8,6}^k \\ C_{8,7}^k \\ C_{8,8}^k \end{bmatrix} = \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 & 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 & 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 1 & 0 & 1 & 1 & 0 \end{bmatrix}, k=1 \sim 8$

(e)  $C_{16}^m = \begin{bmatrix} C_{16,1}^m \\ C_{16,2}^m \\ C_{16,3}^m \\ C_{16,4}^m \\ C_{16,5}^m \\ C_{16,6}^m \\ C_{16,7}^m \\ C_{16,8}^m \\ C_{16,9}^m \\ C_{16,10}^m \\ C_{16,11}^m \\ C_{16,12}^m \\ C_{16,13}^m \\ C_{16,14}^m \\ C_{16,15}^m \\ C_{16,16}^m \end{bmatrix} = \begin{bmatrix} C_{8,1}^k & C_{8,1}^k & C_{8,2}^k & C_{8,2}^k & C_{8,3}^k & C_{8,3}^k & C_{8,4}^k & C_{8,4}^k & C_{8,5}^k & C_{8,5}^k & C_{8,6}^k & C_{8,6}^k & C_{8,7}^k & C_{8,7}^k & C_{8,8}^k & C_{8,8}^k \\ C_{8,1}^{k'} & C_{8,1}^{k'} & C_{8,2}^{k'} & C_{8,2}^{k'} & C_{8,3}^{k'} & C_{8,3}^{k'} & C_{8,4}^{k'} & C_{8,4}^{k'} & C_{8,5}^{k'} & C_{8,5}^{k'} & C_{8,6}^{k'} & C_{8,6}^{k'} & C_{8,7}^{k'} & C_{8,7}^{k'} & C_{8,8}^{k'} & C_{8,8}^{k'} \end{bmatrix}, m=1 \sim 16, k=1 \sim 8$

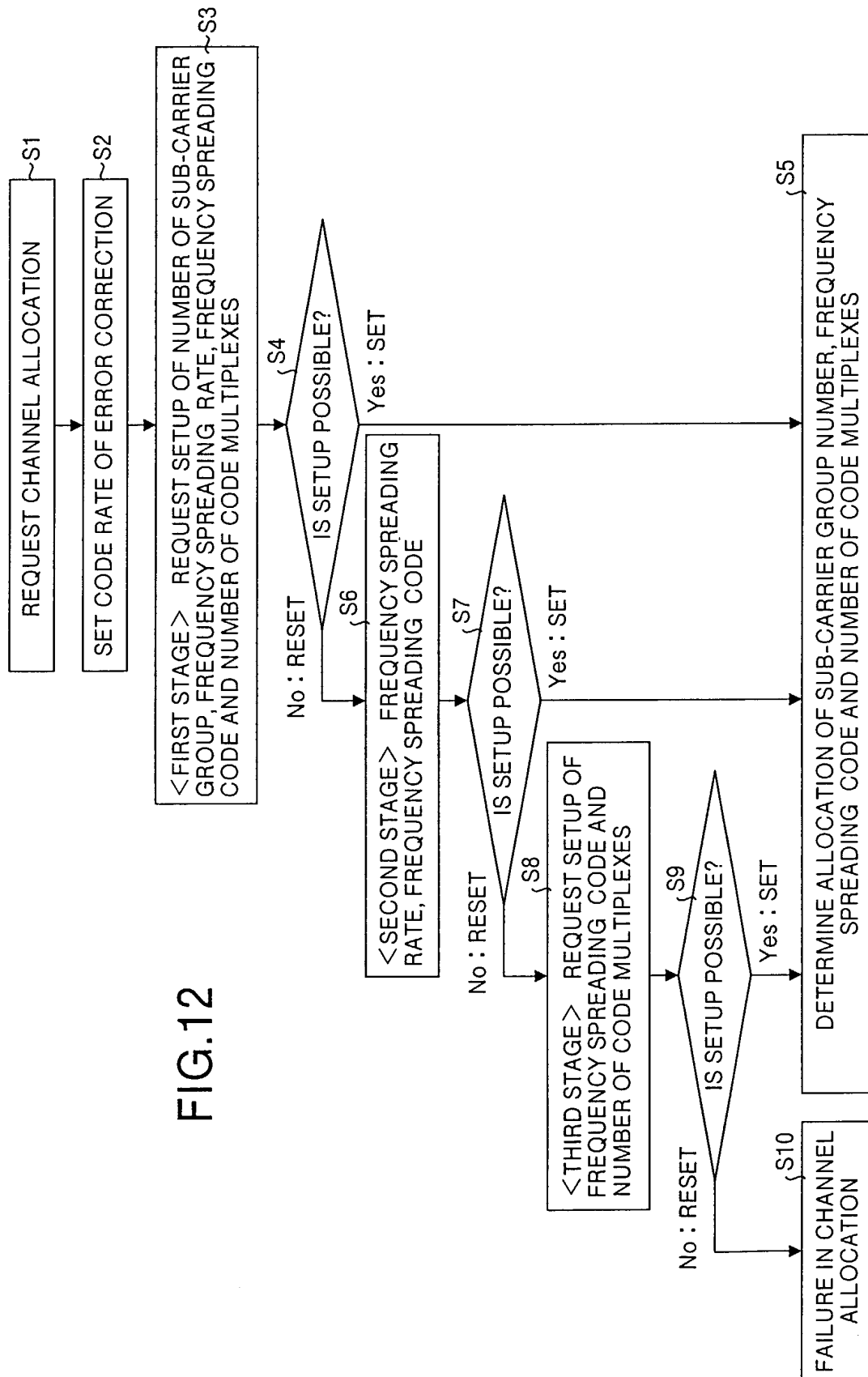


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FIG.11



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FIG.13

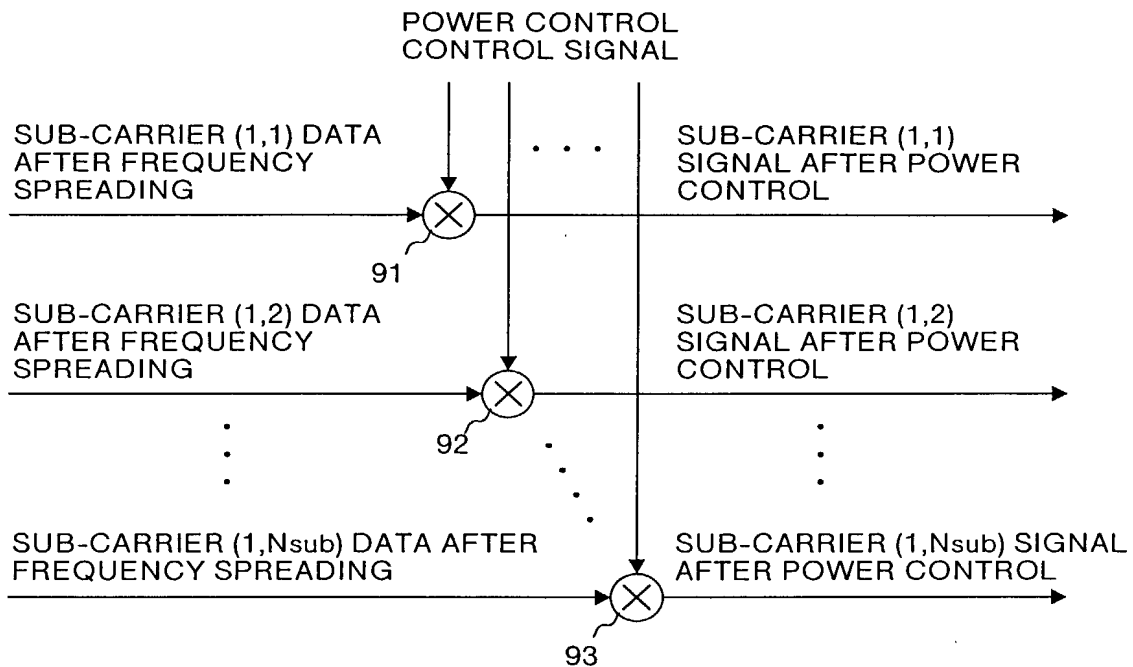


FIG.14

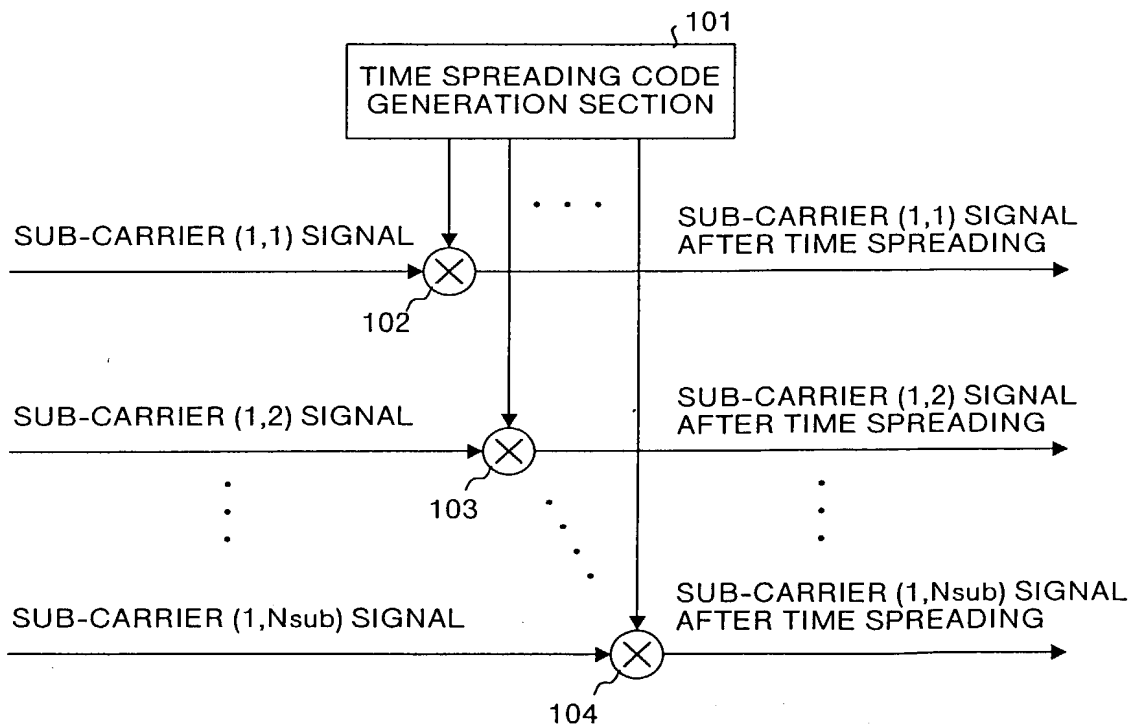


FIG.15

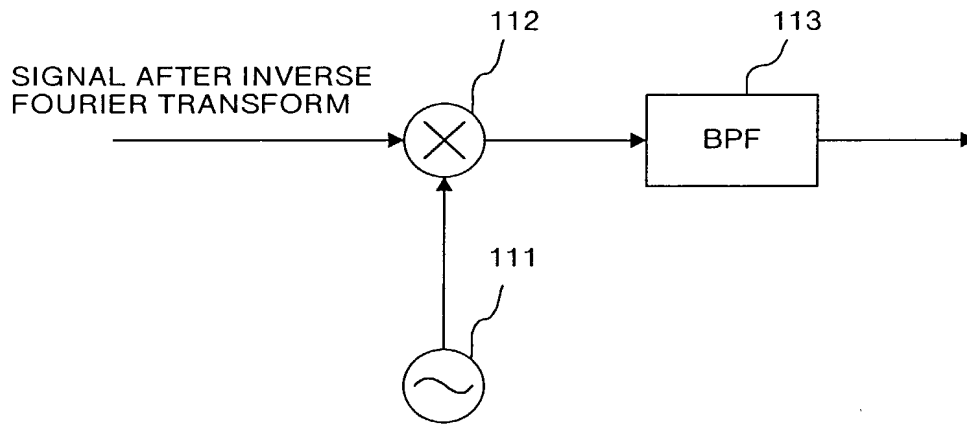


FIG.16

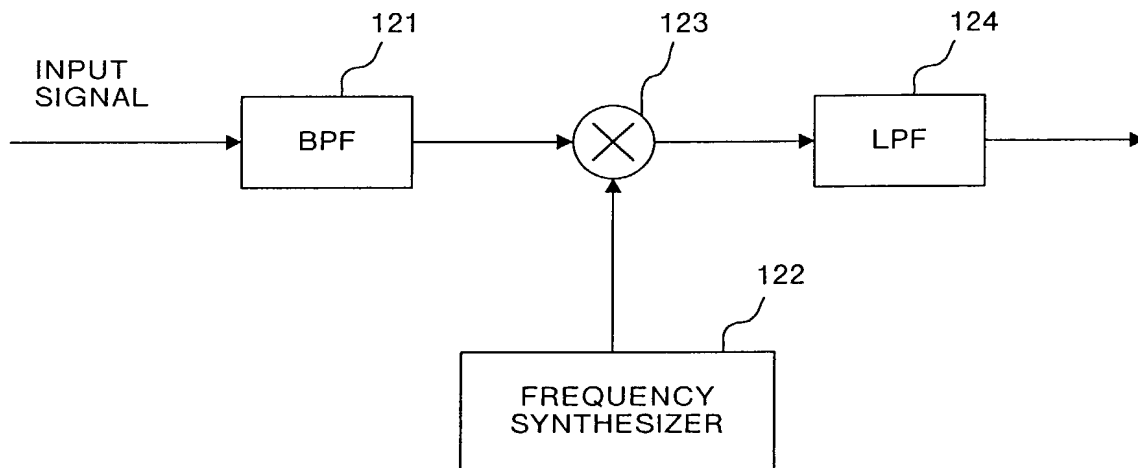


FIG.17

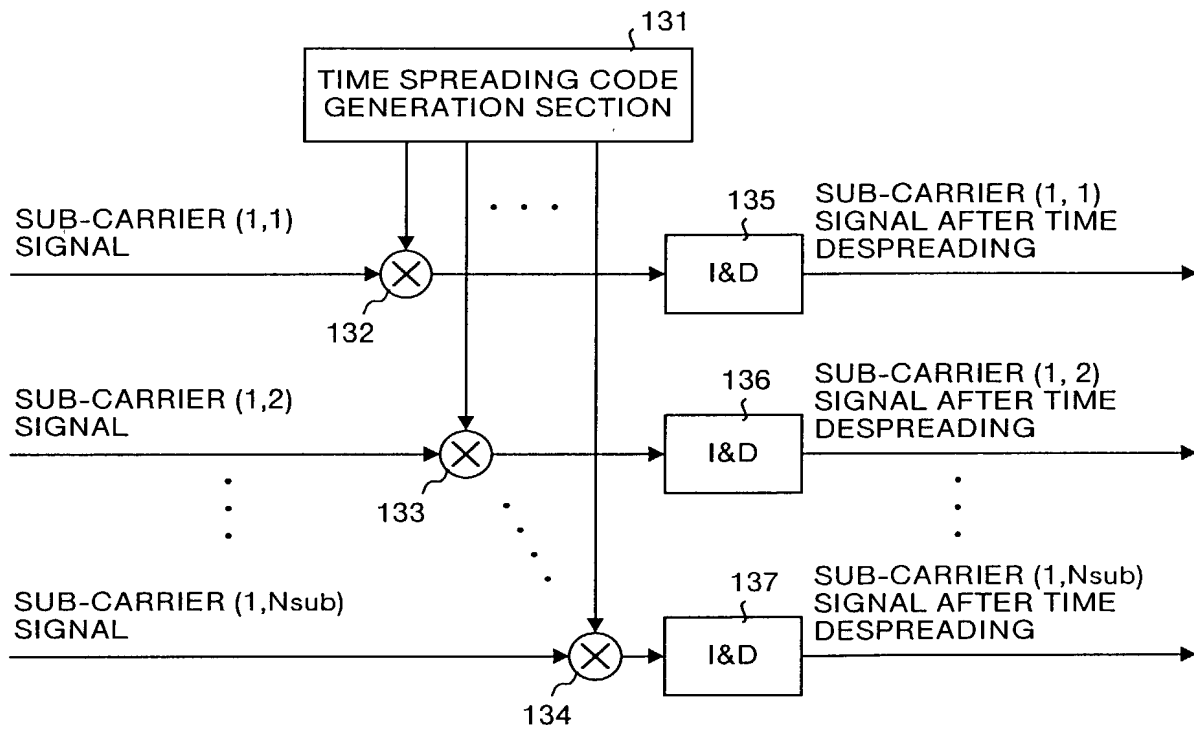


FIG.18

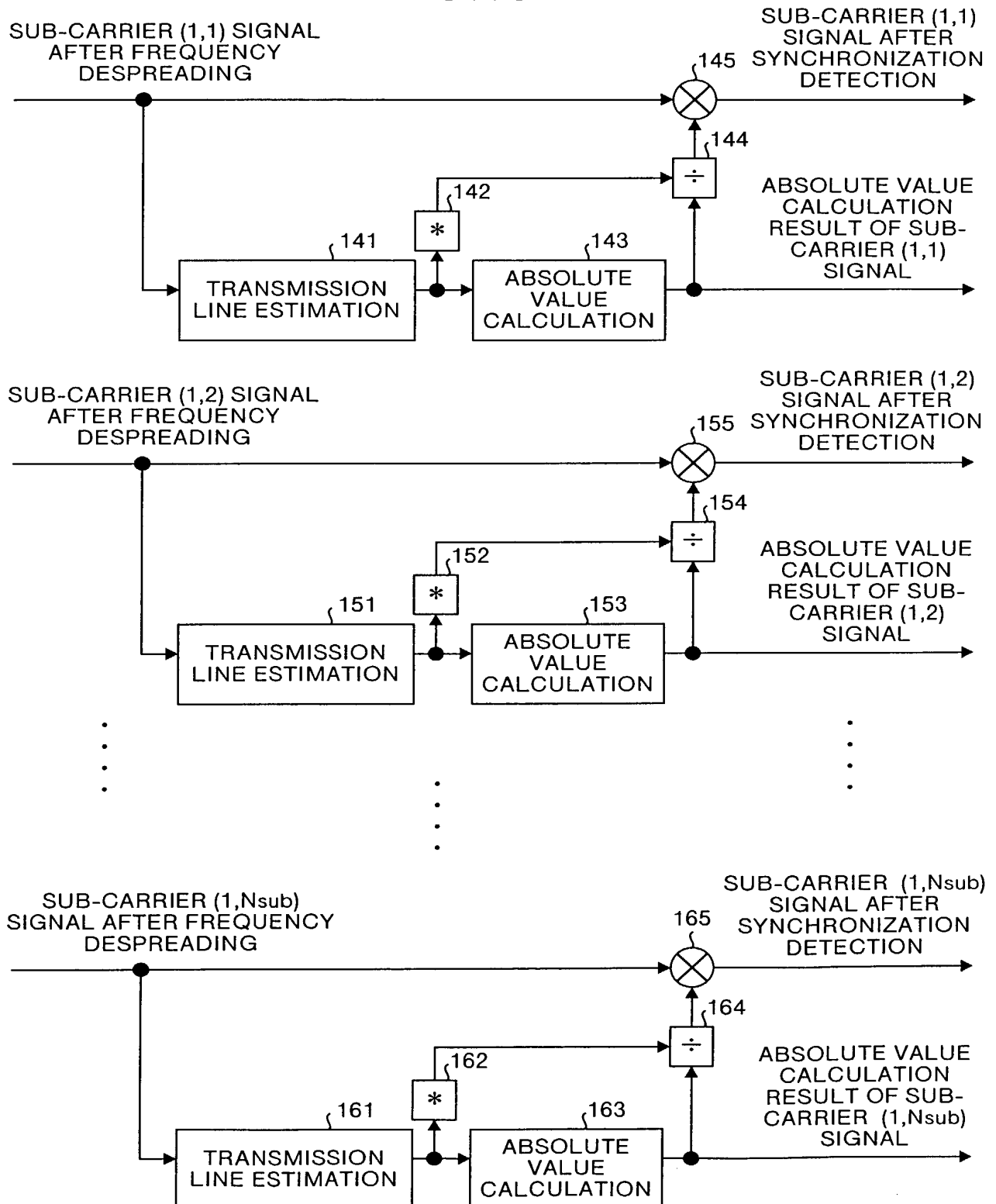


FIG.19

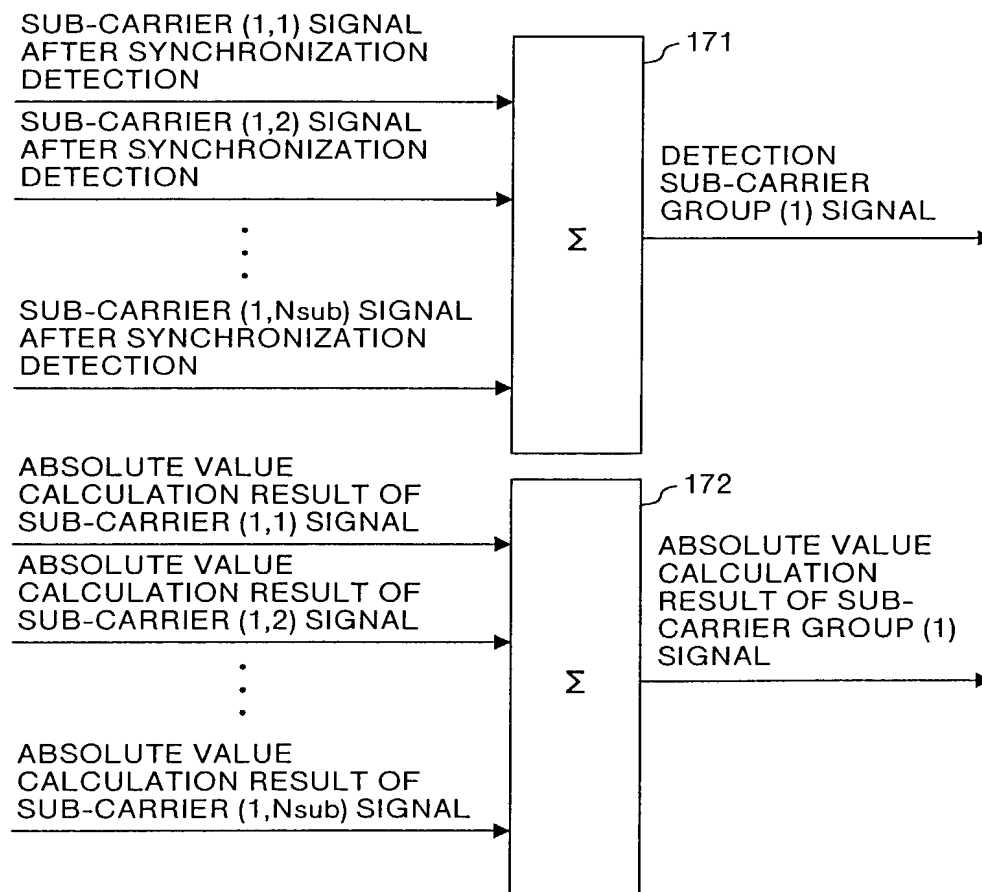


FIG.20

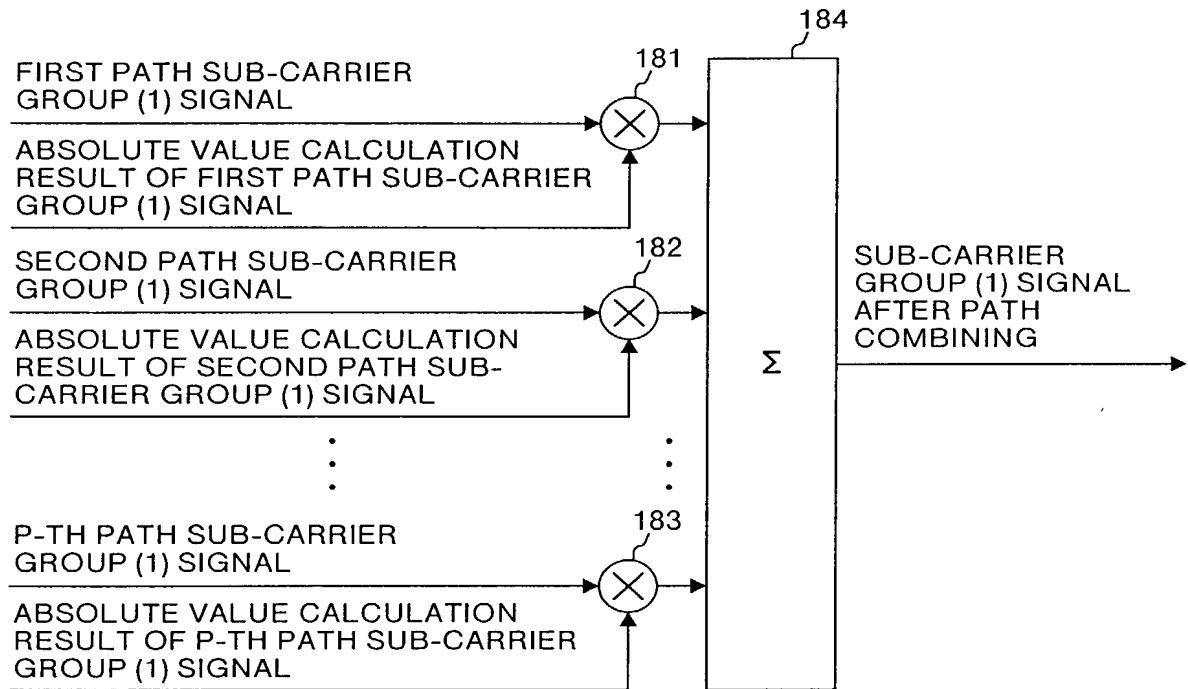




FIG.21

WRITE DIRECTION →					
READOUT DIRECTION ↓	(1,1)	(2,1)	(3,1)	. . . . .	(N <sub>c</sub> ,1)
	(1,2)	(2,2)	(3,2)	. . . . .	(N <sub>c</sub> ,2)
	(1,3)	(2,3)	(3,3)	. . . . .	(N <sub>c</sub> ,3)
	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
	(1,N <sub>r</sub> )	(2,N <sub>r</sub> )	(3,N <sub>r</sub> )	. . . . .	(N <sub>c</sub> ,N <sub>r</sub> )

FIG. 22

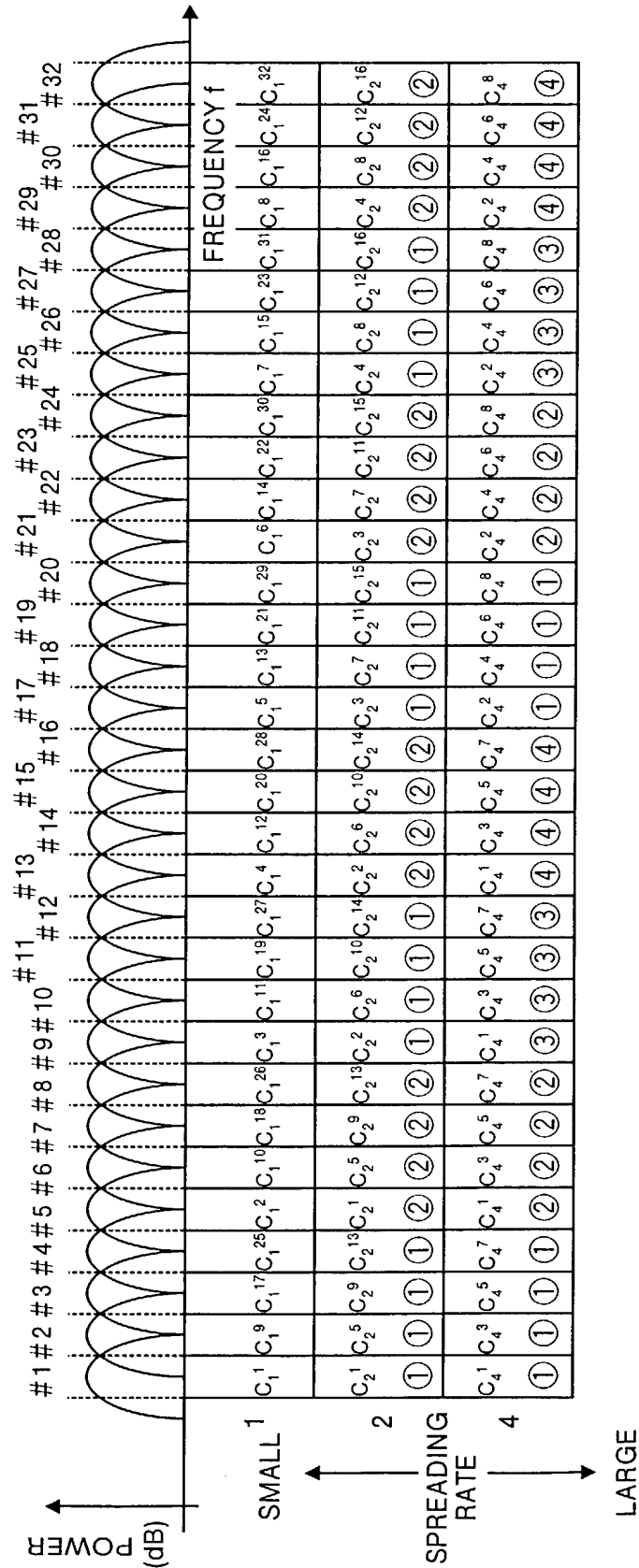


FIG.23

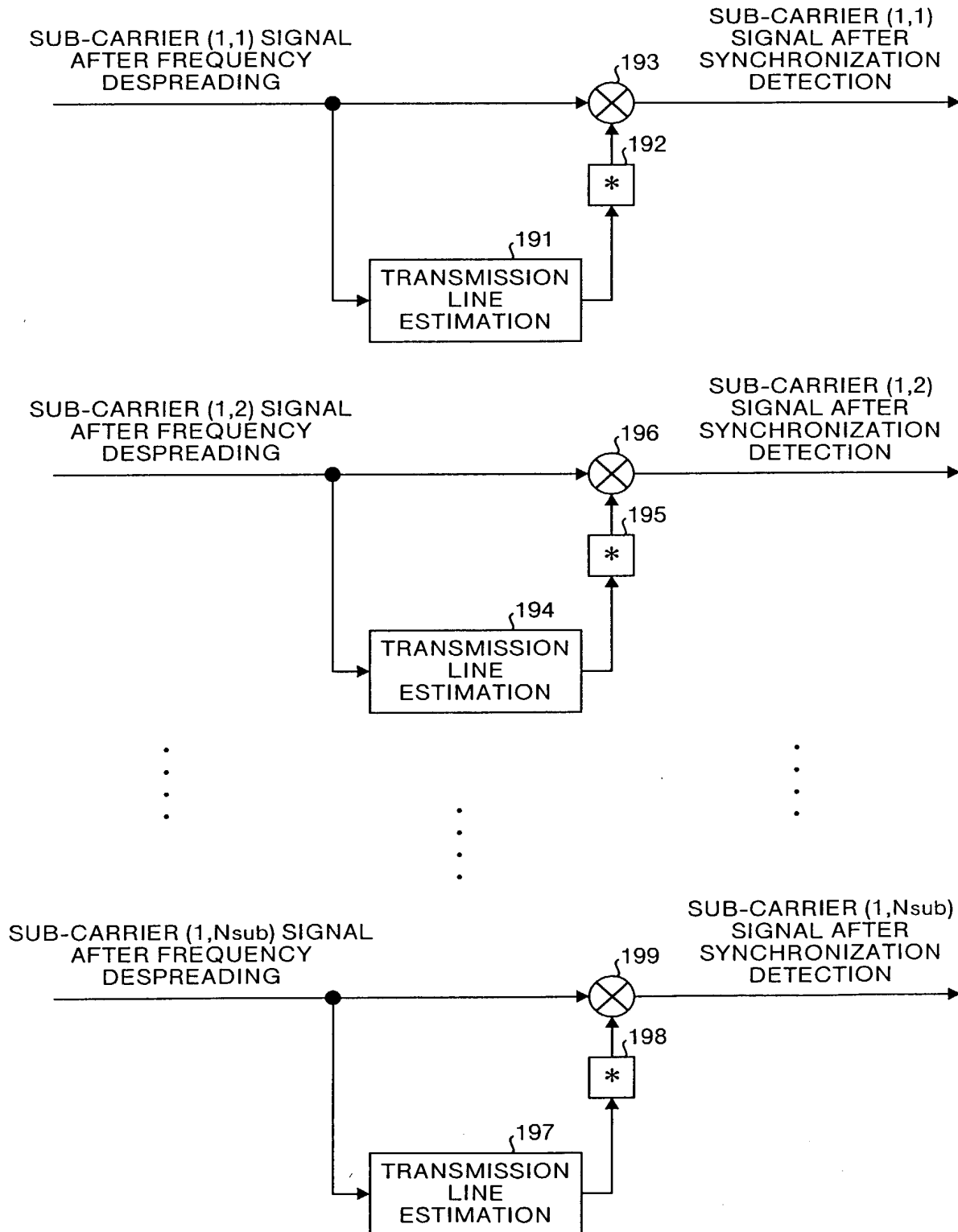


FIG.24

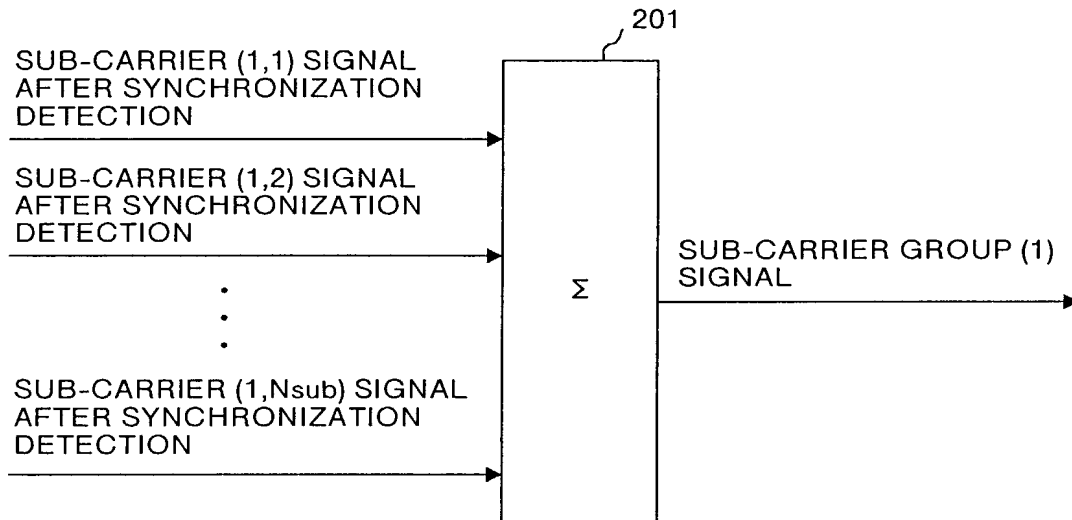
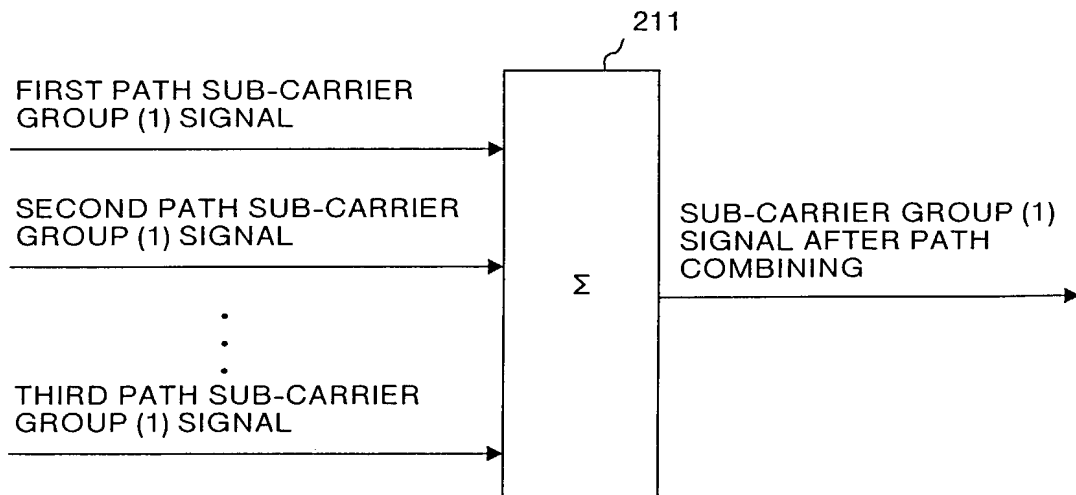
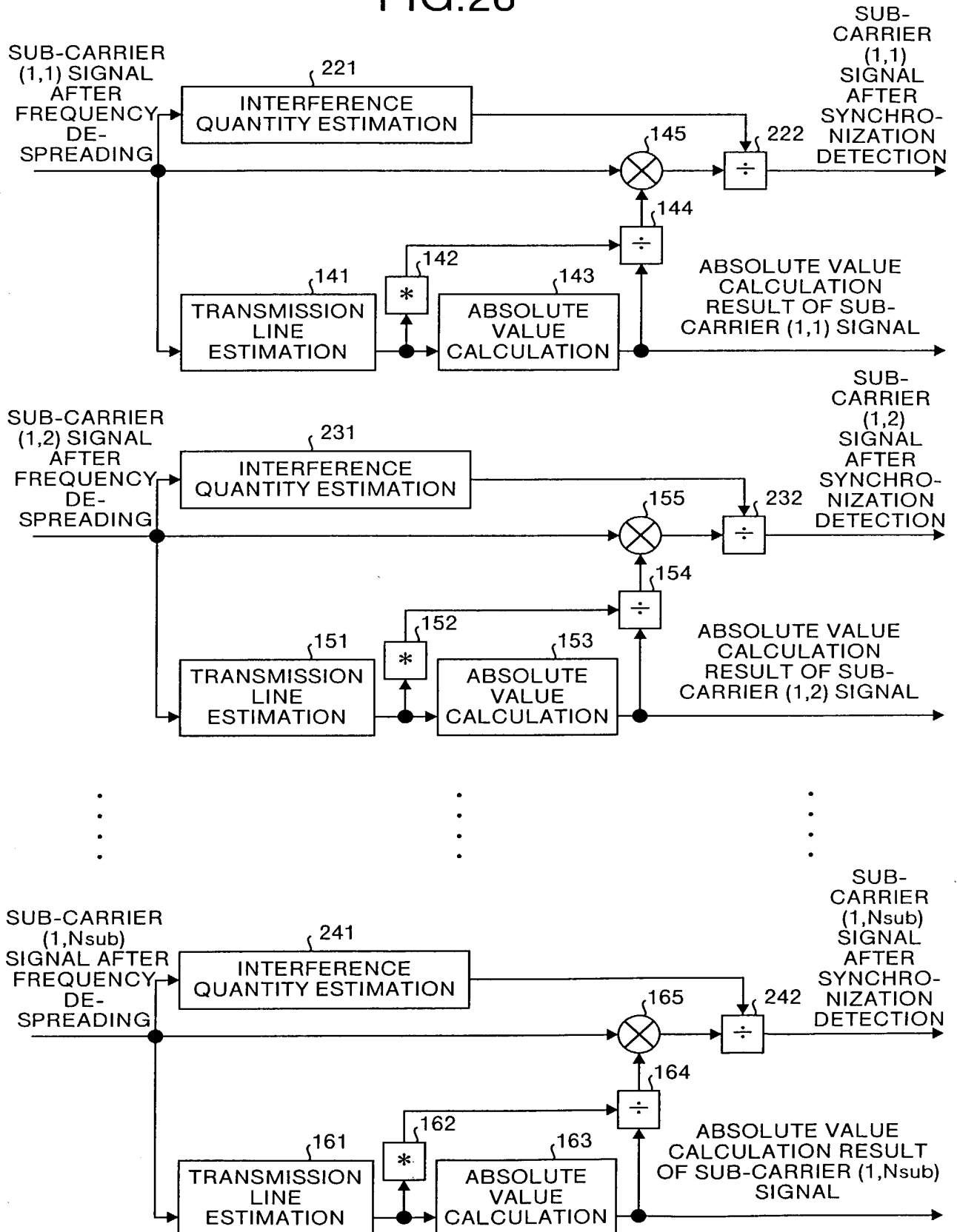


FIG.25



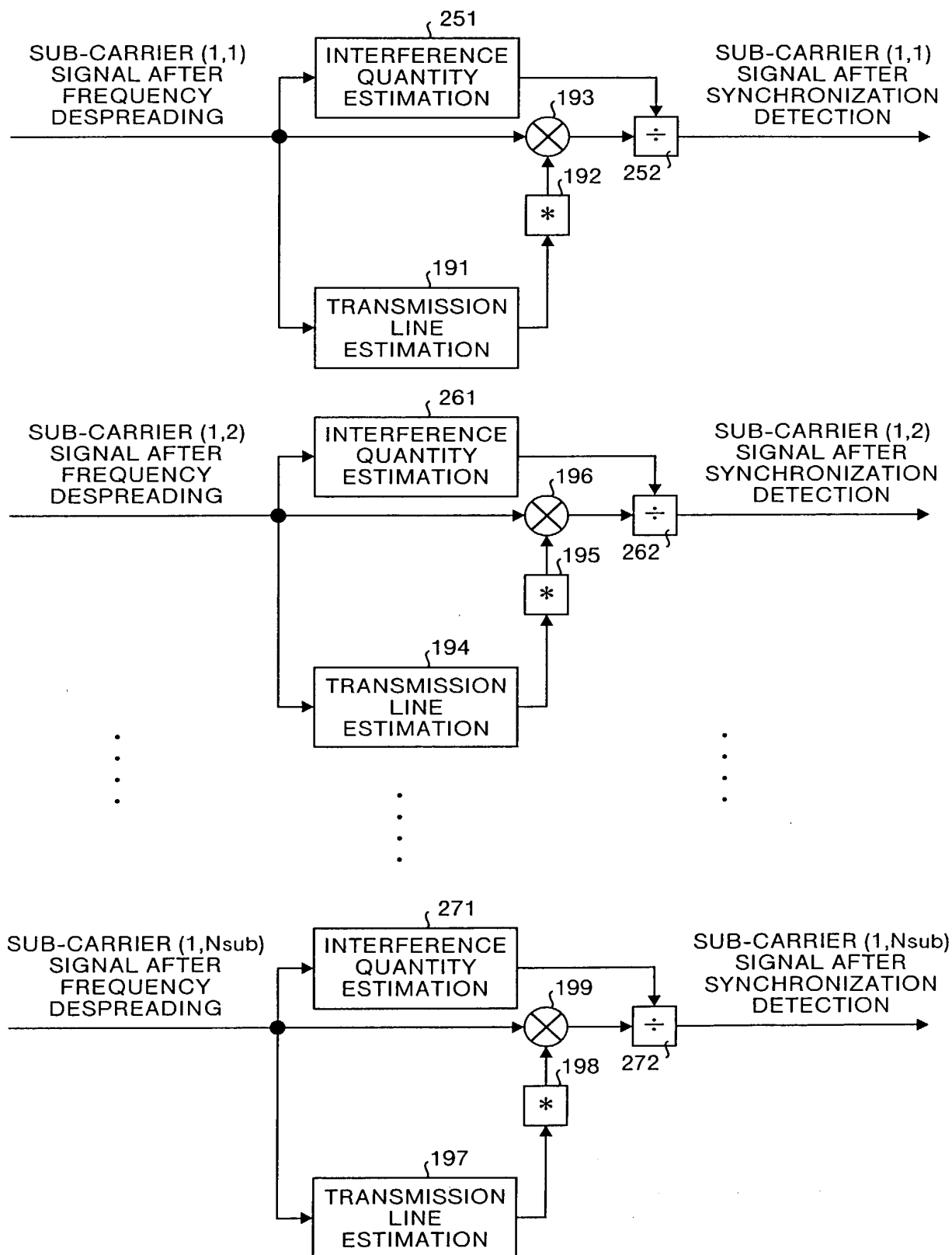
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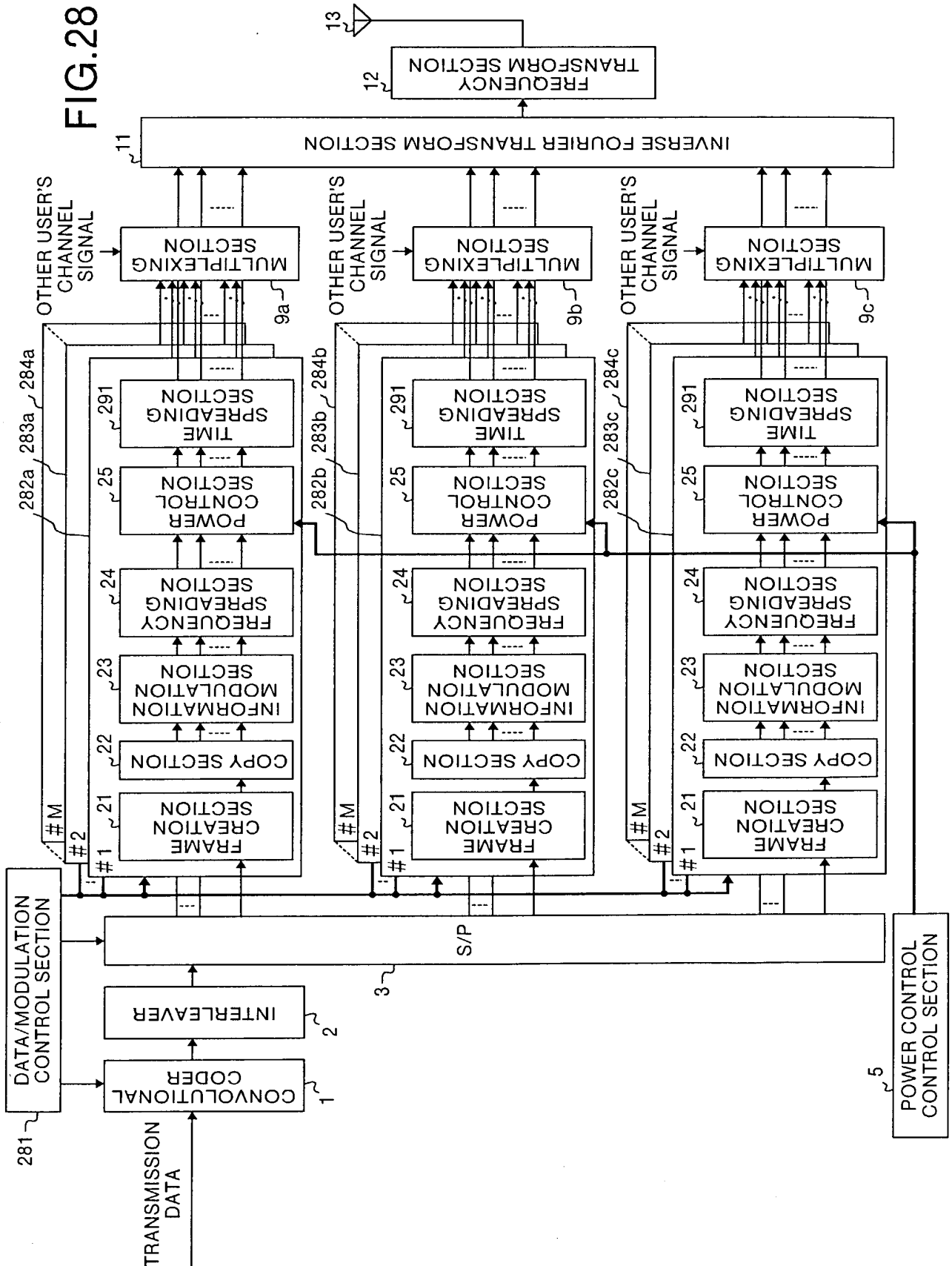
FIG.26



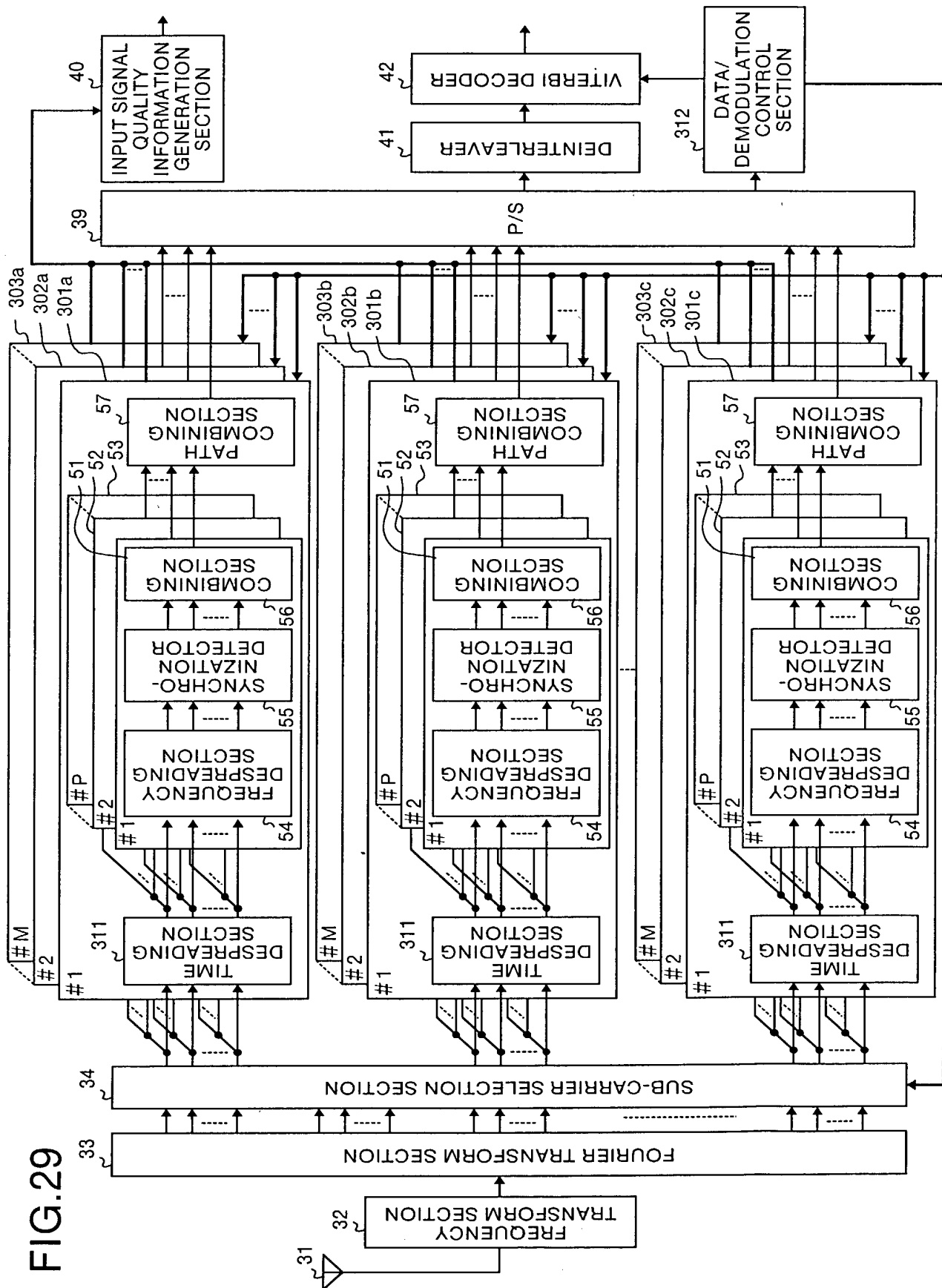
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FIG. 27





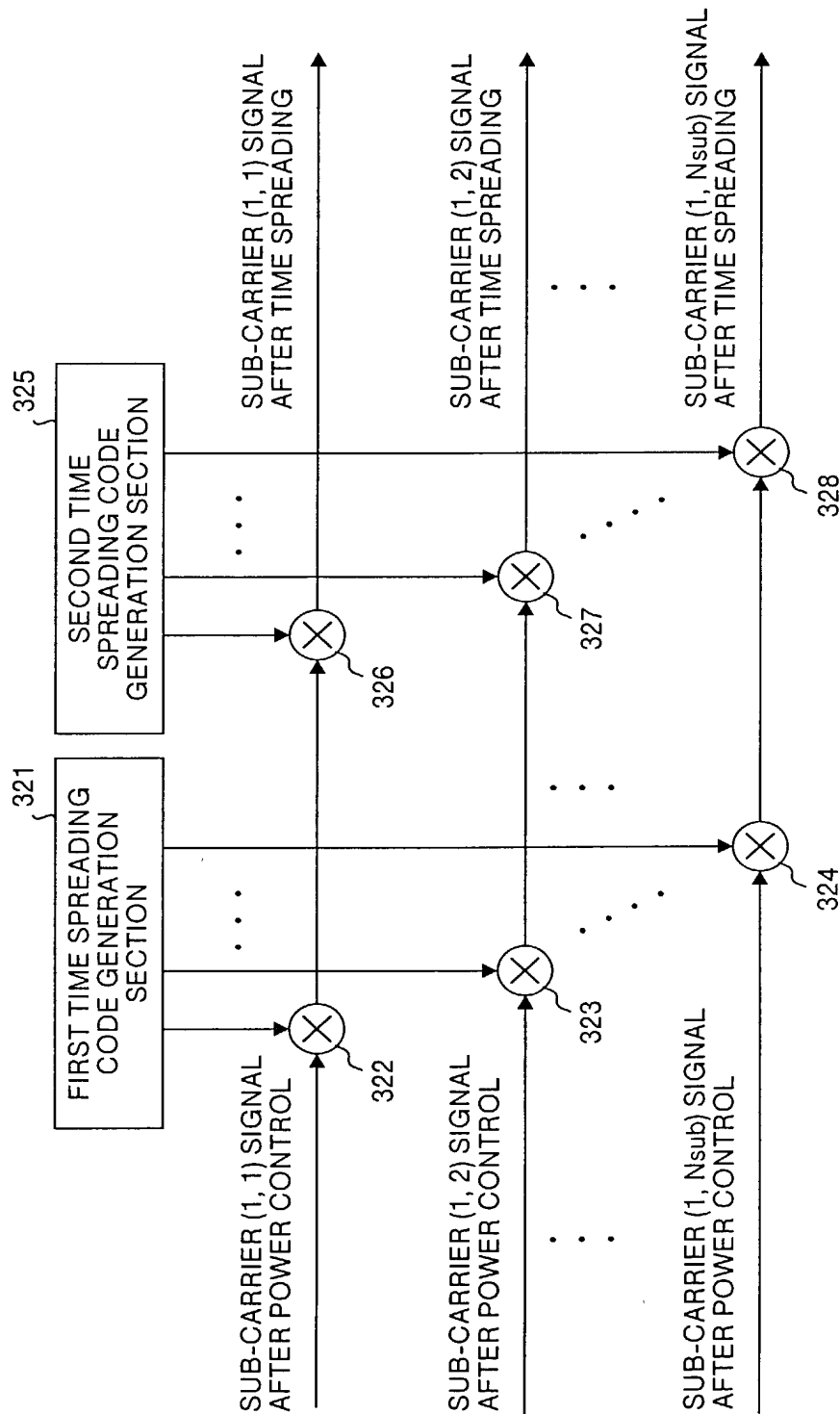
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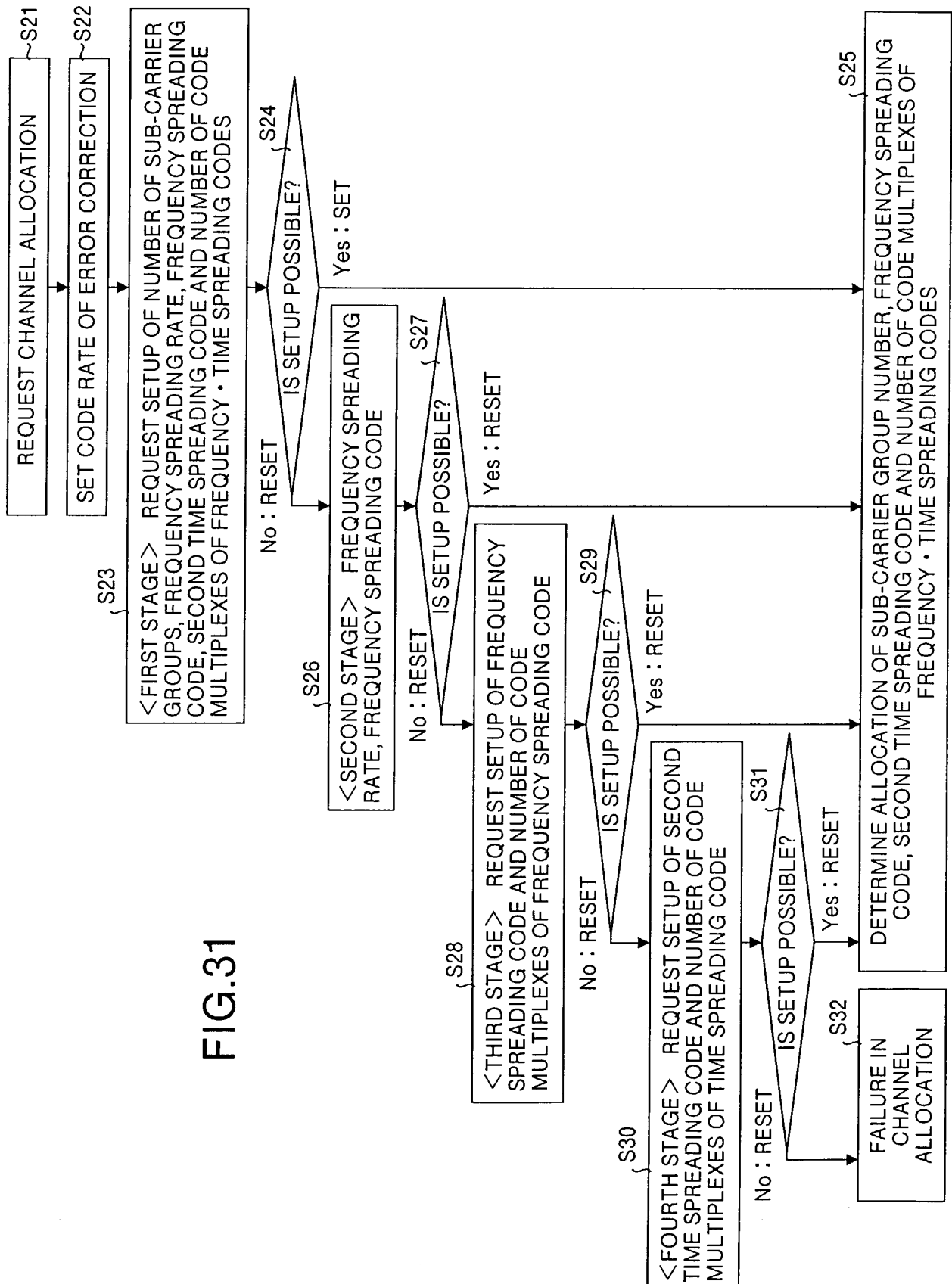




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FIG.30





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FIG.32

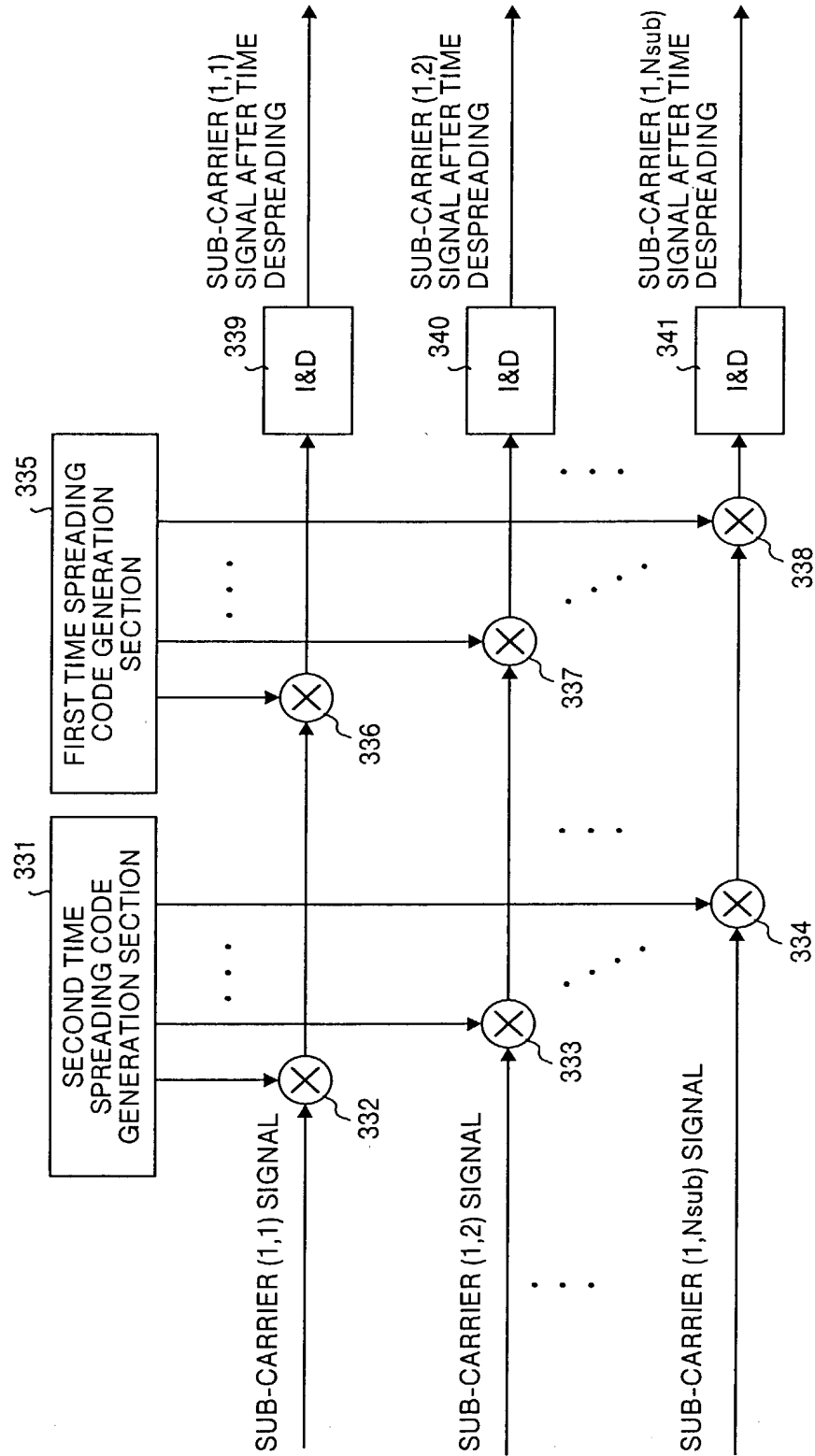
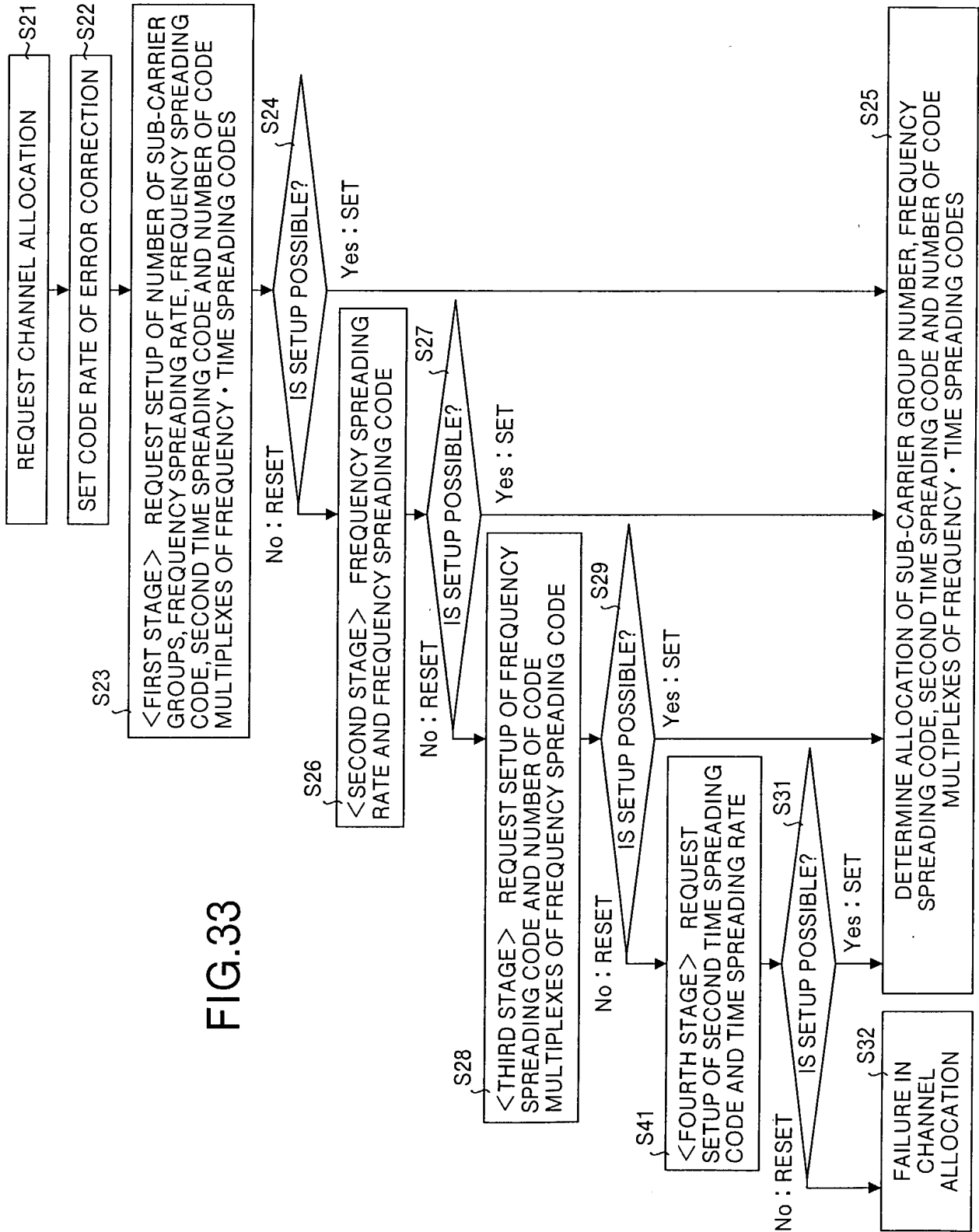


FIG.33



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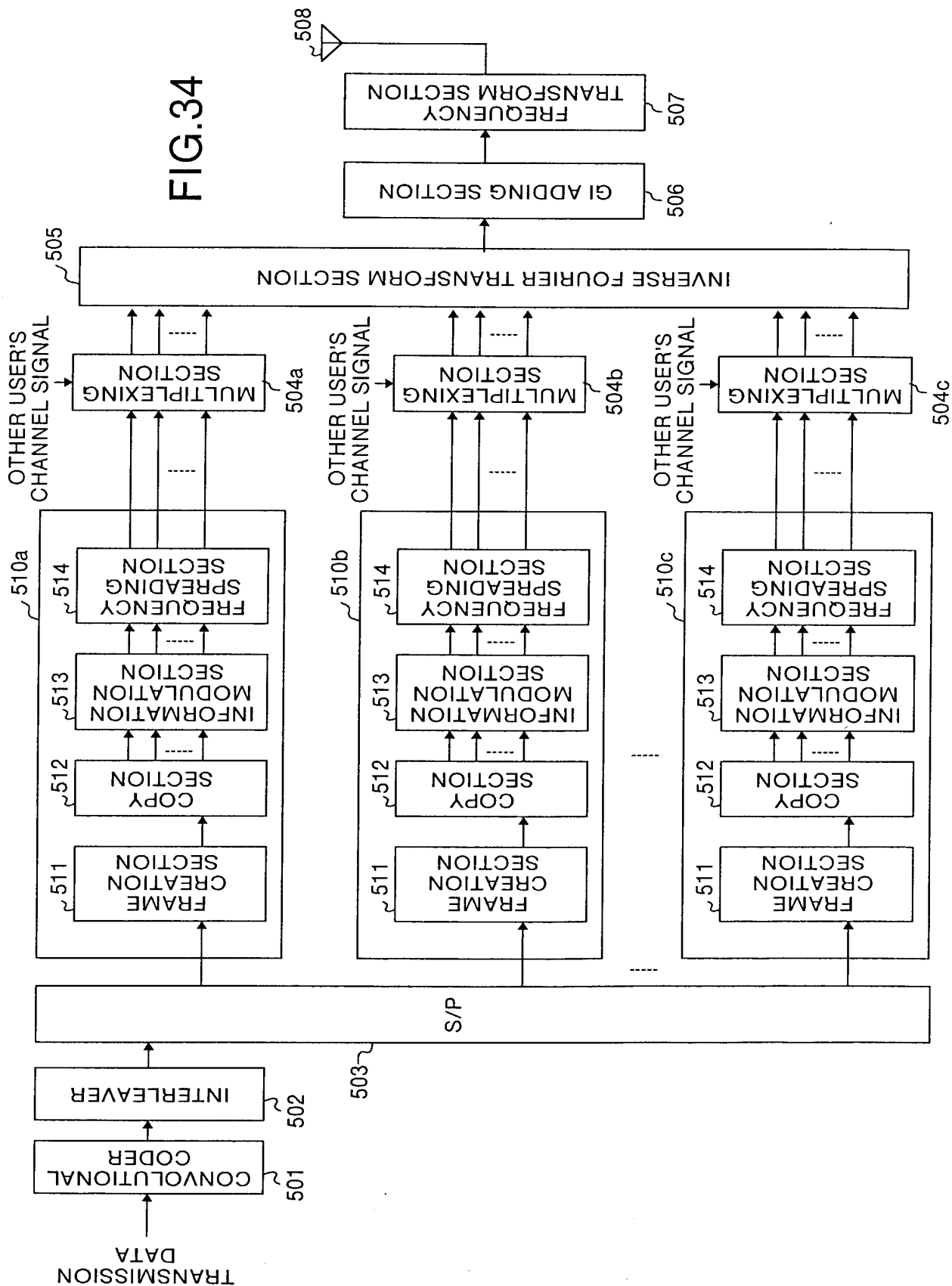


FIG. 35

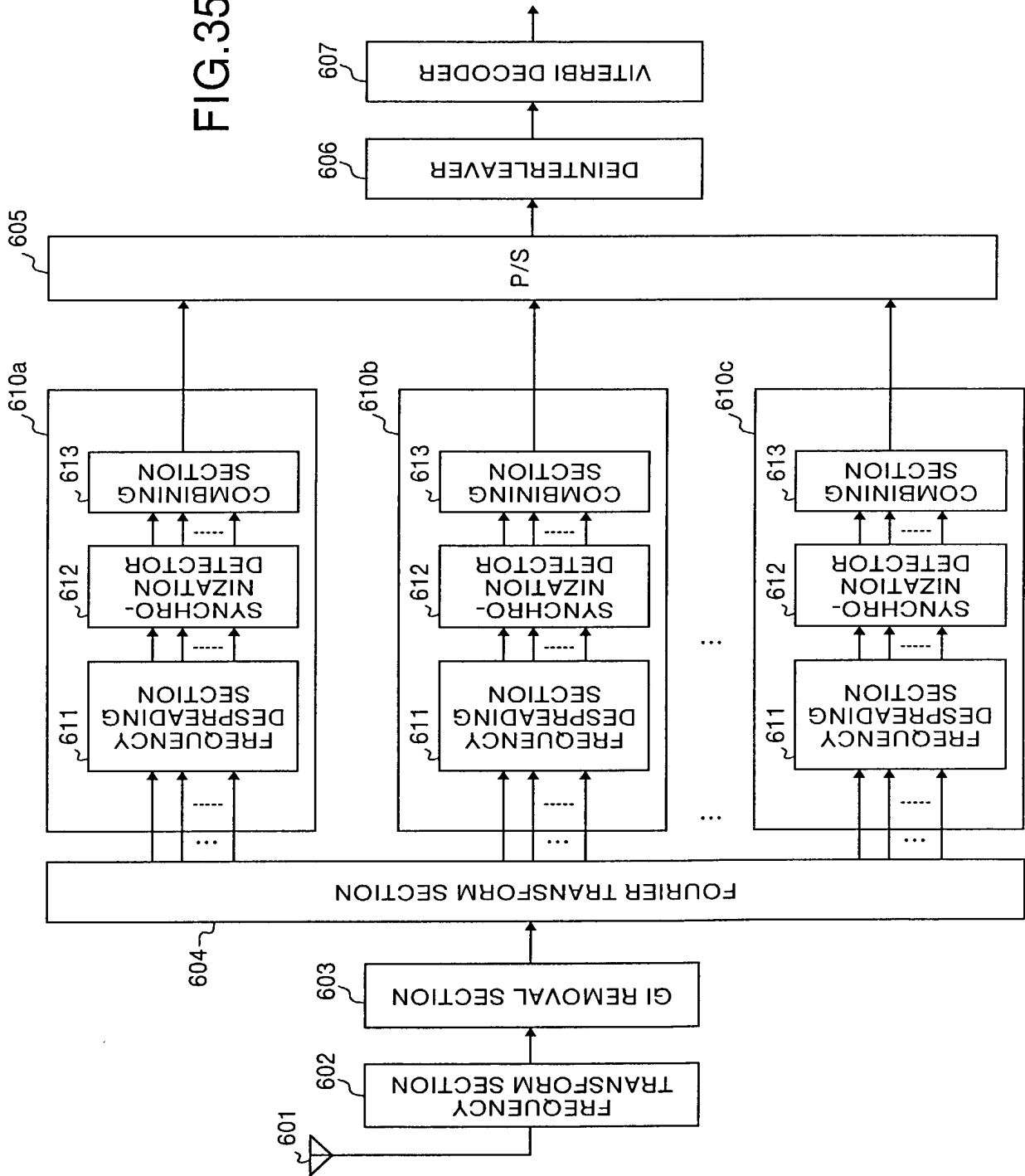


FIG.36

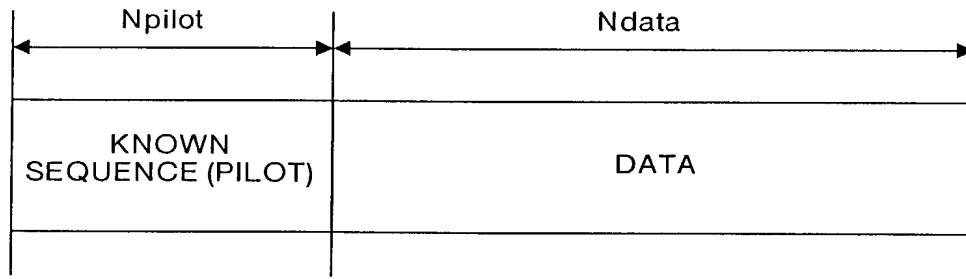


FIG.37

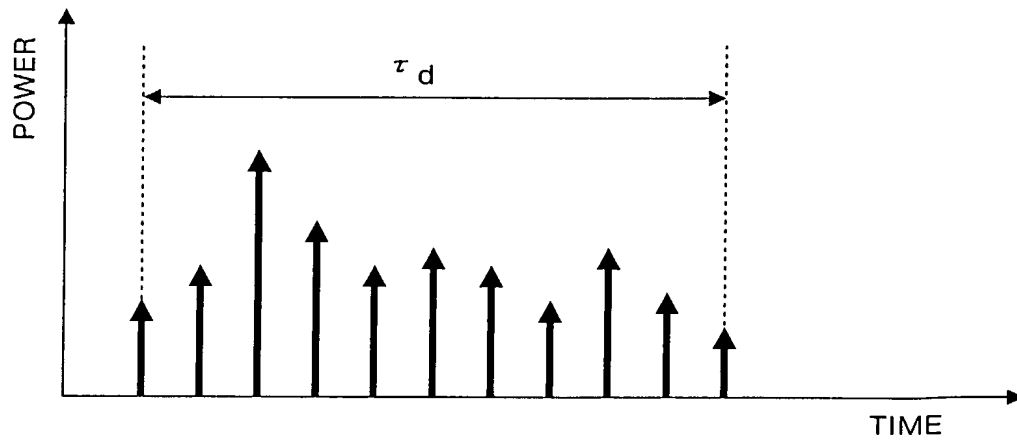


FIG.38

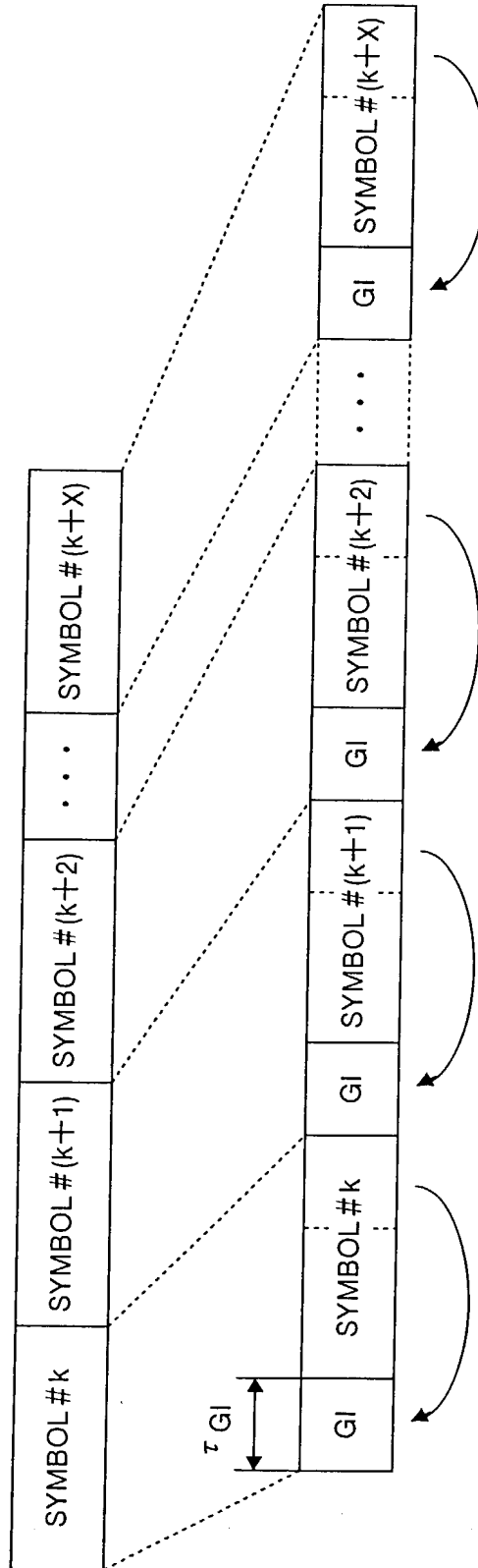




FIG.39

